

REMARKS

Summary Of The Office Action & Formalities

Status of Claims

Claims 1-17 are all the claims pending in the application. By this Amendment, Applicant is amending claims 1 and 16, canceling claims 12-14 without prejudice or disclaimer, and adding new claims 18-20. No new matter is added.

Additional Fees

Submitted herewith is a Petition for Extension of Time with fee and an Excess Claim Fee Payment Letter with fee.

Claim to Foreign Priority

Applicant thanks the Examiner for acknowledging the claim to foreign priority and for confirming that the certified copy of the priority document was received.

Information Disclosure Statement

Applicant also thanks the Examiner for initialing the references listed on form PTO/SB/08 submitted with the Information Disclosure Statement filed on May 5, 2006.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the reference numeral 72. Applicant has amended the specification and claims to delete reference numeral 72 to overcome this objection.

Specification

The *abstract of the disclosure* is objected to because it includes legal phraseology such as ‘said’. (Office Action at page 2.)

The *disclosure* is objected to because of the following informalities: no section headings are present. Further, Page 9, line 25 recites ‘takes’ which appears to be a typographical error for the term ‘makes’. (Office Action at page 3.)

Applicant is amending the specification to overcome these objections.

Claim Objections

Claim 13 is objected to at page 2 of the Office Action because of the following informalities: Line 2 recites ‘form’ and should recite ‘forms’.

Applicant is amending the claim to overcome this objection.

Claim Rejections - § 112

Claims 1-17 are rejected under 35 U.S.C. § 112, second paragraph, for the reason set forth at pages 3-4 of the Office Action.

Applicant is amending the claims to overcome this rejection.

Art Rejections

1. Claims 1-5, 7-12, 15 and 16 are rejected under 35 U.S.C. § 102(e) as being anticipated by Crosnier et al. (US 7,014,069 B2; Crosnier).

2. Claims 1, 2, 7, 8, 10, 11 and 15 are rejected under 35 U.S.C. § 102(b) as being anticipated by Pennaneac’h et al. (US 5,207,659; Penn).

3. Claims 3-6, 12-14 and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Penn in view of Maerte (US 4,830,284).

4. Claim 17 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Crosnier in view of Padar (US 2003/0183655 A1).

5. Claim 17 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Penn in view of Maerte as applied to claim 16 above, and further in view of Padar.

Applicant respectfully traverses.

Claim Rejections - 35 U.S.C. § 102

1. *Claims 1-5, 7-12, 15 And 16 In View Of Crosnier et al. (US 7,014,069 B2; Crosnier).*

In rejecting claims 1-5, 7-12, 15 and 16 in view of Crosnier et al. (US 7,014,069 B2; Crosnier), the grounds of rejection state:

Crosnier shows a pump comprising a pump body (1), a pump chamber (17), a piston (8) sliding in the pump chamber, a dispensing orifice (4), and a shutter (portion of 9 adjacent 4) forming an outlet valve with the dispensing orifice and embodied in one piece with the piston (Figure 1), the shutter being movable between a closed position of the dispensing orifice and an open position of the dispensing orifice (col. 5, ll. 39-46), wherein the pump only has one elastic element (5) to bring the piston to its rest position after actuation as well as drive the shutter to a closed position (col. 6, ll. 39-42 & 63-65).

Regarding claim 2, *Crosnier* shows the spring being away from all contact with the fluid product (col. 5, ll. 15-17).

Regarding claims 3-5, *Crosnier* shows the pump body embodied with a retaining ring (top portion of 1) and a plunger tube (3).

Regarding claims 7-8, *Crosnier* shows the pump comprising a dispensing head (2) including the dispensing orifice placed around the pump body (Figure 1).

Regarding claim 9, *Crosnier* shows the dispensing head being connected onto the retaining ring (Figure 1) and stops (32 and 33) defining the rest position of the pump.

Regarding claims 10-11, *Crosnier* shows an insert (10) embodied with the shutter and placed in the pump chamber upstream of the dispensing orifice (Figure 1).

Regarding claim 12, *Crosnier* shows the pump constituted by only 4 parts including the part forming the dispensing head (4), the part forming the piston and shutter (8/9), the part forming the spring (5), and the part forming the pump body, retaining ring, and plunger tube (1).

Regarding claim 16, *Crosnier* shows the pump of claim 1 attached to a tank (receptacle, col. 4, line 23).

Office Action at pages 5-6.

Claim 1 has been amended to incorporate the features of claims 12-14. Accordingly, claim 1 recites, in part:

wherein said pump is constituted by only four parts including a part forming a dispensing head (40), a part forming the piston (30) and the shutter (38), a part forming the elastic element (50), and a part forming the pump body (10), a retaining ring (15) and a plunger tube (18),
the part forming the pump body (10), the retaining ring (15) and the plunger tube (18) also forms a seat (71) of an inlet valve (70) of the pump chamber (20) interacting with a valve element (75),
the valve element (75) is integral with the part forming the piston (30) and the shutter (38), and
the inlet valve (70) is open when the pump is in the rest position.

The Examiner concedes that *Crosnier* does not disclose the part forming the seat (71) of the inlet valve (70) as recited in claim 1 (previously recited in claim 13). Thus, the rejection is moot.

However, the Examiner asserts that *Maerte* teaches the features of claims 12-14 in combination with *Penn*. Thus, Applicant addresses these rejections below with respect to *Penn* and *Maerte* under 35 U.S.C. § 103.

2. *Claims 1, 2, 7, 8, 10, 11 And 15 In View Of Pennaneac'h et al. (US 5,207,659; Penn).*

As noted above, claim 1 has been amended to incorporate the features of claims 12-14. Thus, this rejection is moot.

Claim Rejections - 35 U.S.C. § 103

1. *Claims 3-6, 12-14 And 16 Over Penn In View Of Maerte (US 4,830,284).*

In rejecting claims 3-6, 12-14 and 16 over *Penn* in view of *Maerte* (US 4,830,284), the grounds of rejection state:

Penn shows all aspects of applicant's invention as set forth in claim 1, but does not disclose the pump comprising a retaining ring or plunger tube connected to the pump body. However, *Maerte* shows a pump having a pump body (12) to which a retaining ring (portion of 12 with threads 13) and plunger tube (16) are attached. It would have been obvious to one of ordinary skill in the art at the time of the invention, under the teachings of *Maerte*, to have embodied a retaining ring and plunger tube with the pump body of *Penn* in order to enable the pump to be attached to a container (retaining ring) and allow for the pump to expel all fluid in the container (plunger tube).

Regarding claim 6, *Penn* as modified by *Maerte* shows the retaining ring embodied in one piece with an inlet valve seat of the pump chamber (*Penn*, 6 with 6a).

Regarding claim 12, *Penn* as modified by *Maerte* shows the pump constituted by only four parts including the part forming the dispensing head (*Penn*, 39 with 8), the part forming the piston (*Penn*, 15 with 17), the part forming the spring (*Penn*, 40), and the part forming the pump body, retaining ring, and plunger tube (*Penn*, 1 with *Maerte*, 16 and bottom portion of 12).

Regarding claim 13, *Penn* as modified by *Maerte* shows the part forming the pump body, retaining ring, and plunger tube also forming a seat (*Penn*, 6) of an inlet valve (*Penn*, 6a) of the pump chamber interacting with a valve element (*Penn*, 16).

Regarding claim 14, *Penn* as modified by *Maerte* shows the valve element integral with the part forming the piston and shutter (*Penn*, Figure 1).

Regarding claim 16, *Penn* as modified by *Maerte* shows the pump of claim 1 connected to a tank (*Maerte*, 14).

Office Action at pages 8-9.

Claim 1 has been amended to incorporate the features of claims 12-14. Accordingly, claim 1 recites, in part:

wherein said pump is constituted by only four parts including a part forming a dispensing head (40), a part forming the piston (30) and the shutter (38), a part forming the elastic element (50), and a part forming the pump body (10), a retaining ring (15) and a plunger tube (18),

the part forming the pump body (10), the retaining ring (15) and the plunger tube (18) also forms a seat (71) of an inlet valve (70) of the pump chamber (20) interacting with a valve element (75),
the valve element (75) is integral with the part forming the piston (30) and the shutter (38), and
the inlet valve (70) is open when the pump is in the rest position.

Applicant submits that Penn does not teach or fairly suggest a retaining ring and a plunger tube formed together with the pump body, as recited in claim 1 (see FIG. 1 of Penn). Furthermore, the inlet valve is formed between the pump body and the piston, by a widened portion of the pump body's surface on which the piston slides. Thus, the inlet valve is closed in the rest position. According to claim 1, the inlet valve is open when the pump is in the rest position.

According to FIG. 1 of Maerte, Maerte merely shows that the retaining ring is a separate part from the pump body. The inlet valve is formed between the pump body and a ball located in said pump body, which is separate from the piston. Thus, Maerte does not teach or fairly suggest "a part forming the pump body (10), a retaining ring (15) and a plunger tube (18)", as recited in claim 1. Furthermore, the inlet valve of Maerte is closed in the rest position. According to claim 1, the inlet valve is open when the pump is in the rest position.

When looking at Penn, a person of ordinary skill in the art would provide the inlet valve on the sliding surface of the piston, which would not allow having an open inlet valve in the rest position.

When looking at Maerte, a person of ordinary skill in the art would provide the inlet valve between the pump body and an element separate from the piston.

In view of the above, Applicant submits that Penn, alone or in combination with Maerte, fails to teach or suggest each and every feature of claim 1.

Applicant submits the remaining claims are patentable at least by virtue of their dependency on claim 1.

2. Claim 17 Over Crosnier In View Of Padar (US 2003/0183655 A1).

As noted above, claim 1 has been amended to incorporate the features of claims 12-14, which are not taught or suggested by Crosnier or Padar. Thus, Crosnier, alone or in combination with Padar, fails to teach or suggest each and every feature of claim 1. Applicant submits that claim 17 is patentable for at least this reason.

3. Claim 17 Over Penn In View Of Maerte As Applied To Claim 16 Above, And Further In View of Padar.

Applicant submits that Padar fails to correct the deficiencies of Penn and Maerte with respect to claim 1. Thus, Applicant submits that claim 17 is patentable at least by virtue of its dependency on claim 16, which depends on claim 1.

New Claims

For additional claim coverage merited by the scope of the invention, Applicant is adding new claims 18-20.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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CUSTOMER NUMBER

Date: December 14, 2009